

REMARKS/ARGUMENTS

This application has been carefully considered in light of the Initial Office Action of June 23, 2004. In the Initial Office Action the Examiner had objected to a number of elements in the drawing figures. These elements have now been corrected by both amendment to the drawings and to the specification.

Claims 1-3 have been rejected under 35 U.S.C. 103 (a) as being obvious and therefore unpatentable over U.S. Patent 6,264,228 to Westervelt when considered in view of U.S. Patent 6,035,977 to Marasco and U.S. Patent 3,318,422 to Frescura. Claim 4 has been rejected over the same three primary references when further considered in view of the teachings of the reference to Herbert U.S. Patent 3,610,434.

The obviousness rejection of claims 1-4 as discussed by the Examiner in the Initial Office Action has been considered. Reconsideration of the grounds for rejection is respectfully requested based upon the comments set forth below.

The present invention is directed to a device which prevents premature activation of the brakes of a towed vehicle in a cable braking system such that the brake cannot be applied in the towing vehicle until a predetermined amount of load is placed on the cables between the towing vehicle and the towed vehicle. In this respect, the present invention discloses a means for

applying a limited amount of pressure on the cable connected to the towed vehicle which allows the cable to be moved only when a pre-determined load is placed on the cable between the towed vehicle and the towing vehicle so that the cable can move after such predetermined load is encountered. This prevents premature activation of the brakes of the towed vehicle as described within the specification of the present application for patent. This is an advancement over prior art structures and is not disclosed in any of the references cited by the Examiner.

In making the rejection of claims 1-3, the Examiner has stated that the element 46 of Westervelt is tantamount to a one way clutch mechanism. However, element 46 is a plunger assembly which provides a guide sleeve for a spring which normally urges an element to a first position. The system is not functioning as a one way clutch mechanism.

Further, the Examiner states that the reference to Marasco discloses a break-away link member 10 having one end connected to the towed vehicle and one end connected to the towing vehicle. However, the structure disclosed in Marasco is not conducive for combination with a cable braking system as disclosed in Westervelt. The structure disclosed in Marasco includes a cable 12 which extends from a braking mechanism to a hook which connects to a towing vehicle. Should the safety chains break and

the towed vehicle separate from the towing vehicle, initial forces are applied along the cable 12 to apply the brake assembly which includes a brake master cylinder 32. Unlike the present invention, there is no cable which extends to the towed vehicle for securement to the brake pedal or lever. Rather, there is a complicated separate master cylinder assembly and brake device which is controlled by force being applied along the cable 12.

The cited reference does include an "S" type hook which is designed to straighten and thus release the cable under conditions where sufficient load has been placed to thereby allow the brakes to be fully applied. Therefore, the "S" hook is designed to ensure that the brakes are fully applied before the cable 12 separates.

It is respectfully submitted that one of ordinary skill in the art would not look to modify a cable type braking system of the present invention in order to incorporate the elements disclosed in the reference to Marasco. Further, one would not look to modify the reference of Westervelt to provide the "S" hook type break-away mechanism.

However, even if one were to combine the elements as suggested by the Examiner, the overall structure would not provide for the inventive elements of the present invention as set forth in the claims of the present application in order to

prevent premature activation of the emergency braking system.

In this respect, the Examiner has cited the reference to Frescura. Frescura, however, discloses a manner of securely locking a cable 14 within a cylinder 1 utilizing a locking screw 7. There is no discussion in the reference of any type of movement of the cable relative to the ring, which ring is secured to the cable 14 by the locking screw 7. The reference does not provide or teach any desire for providing only a limited force between the locking screw and the 14 such that after a pre-determined load, the cable 14 can move relative to locking screw 7. Just the reverse is actually being taught in the cited reference. The locking screw must securely engage the cable 14 and prevent any relative movement of the cable with respect to the ring 4 mounted within the housing 1.

In view of the foregoing, this reference teaches away from the inventive characteristics of the present invention as set forth in the specification and claims of the present application.

In view of the foregoing, the combination suggested does not provide for relative movement between the brake cable and a stop mechanism after a predetermined load is placed on the brake cable as described by the present invention in order to prevent premature activation of the brake assembly. The references cannot make obvious the present invention as claimed. Therefore,

reconsideration of the grounds for rejection for obviousness with respect to claims 1-3 is respectfully requested.

Further, the rejection of claim 4 over the combination including the additional reference to Herbert is also respectfully traversed in view of comments set forth above. The reference to Herbert discloses an emergency release device for a railway car and is not believed to be combinable with the references to Westervelt, Frescura or Marasco. The reference is being cited to show a shearing bolt as defined by claim 4 of the present application. However, there is no incentive in the reference nor the primary references to suggest the combination or the need for such a shearing bolt in any of the braking systems of the three primary references.

In view of the foregoing, it is respectfully submitted that claim 4 is also not obvious and should be allowable over the prior art.

An earnest has to be made to place this application in condition for allowance which action is respectfully solicited. Should the Examiner have any questions concerning the amendments submitted herewith or the allowability of the claims, it would be appreciated if the Examiner would contact the undersigned attorney of record at the telephone number shown below for purposes of scheduling a personal interview before taking any

action which may be considered final.

Respectfully submitted,

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By 

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IN THE DRAWINGS:

Submitted herewith are substitute sheets of drawings showing amendments to the drawing figures. The amendments are being made to show the cross-section 4-4 in Fig. 3 and to renumber the clamp original shown at 27 in Fig. 1 as no. 29. No new matter has been added. It would be appreciated if the Examiner would indicate the acceptance of the substitute drawings in the next office communication.